

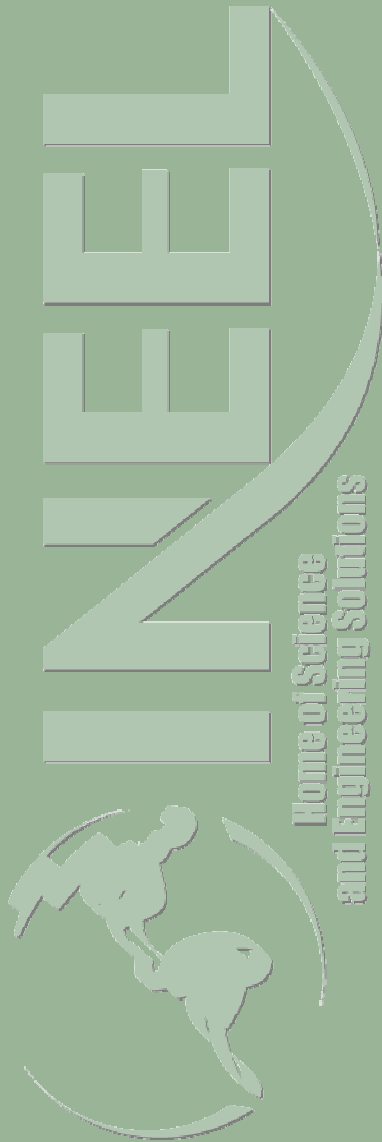
Idaho National Engineering and Environmental Laboratory

AFC Status

ATW-1A, 1B, 1C, and 1D Fuel Irradiations

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Current Project Activities

- *Basket Material Procurement and Fabrication*
- *Experiment Analyses*
- *Advanced Test Reactor Critical (ATRC) Facility–Mockup Test*
- *Handling Tool and Bucket Fabrication*
- *Experiment Safety Assurance Package Preparation (ESAP)*

Basket Material Procurement

- *Material Procured*
 - *29 wt% Boron / 6061 Aluminum Billet*
 - *Material to be Extruded into Twenty-Six 108.5" Tubes*
 - *Extrusion of Tube Failed (2 Attempts)*
 - *Extrusion of Rod Successful*
 - *Rod Extrusion Shorter than Tube Extrusion*
 - *Vendor Attempting to Gun Drill Rod*

Basket Material Alternative

- *Alternative Design Using Cadmium Being Investigated*
 - *Preliminary Analyses Completed*
 - *Cadmium Vendor Identified*
 - *Disposal Issues Being Evaluated*
 - *Fabrication of Baskets Being Evaluated*

Experiment Analyses

- *Borated Aluminum Baskets*
 - *Neutronic* 98% Complete
 - *Thermal* 90% Complete
 - *Structural* 90% Complete
- *Cadmium Wrapped Baskets*
 - *Preliminary Physics and Thermal Analyses Complete*
- *All Experiment Analyses to be Completed by January 31, 2003*

ATRC Facility–Mockup Test

- *Test Start Planned for February 4, 2003*
 - *Reactivity Measurements*
 - *Axial Flux Profile Measurements*
 - *Azimuthal Flux Measurements*
 - *Test Plan 95% Complete*
- *Measurements needed for CSAP and ESAP Development*
- *Project Currently Able to Meet Schedule to Perform Test*

Handling Tool & Bucket Fabrication

- *Handling Tool Fabricated*
 - *Personnel Training Conducted*
- *Handling Buckets Fabricated*

Experiment Safety Assurance Package (ESAP)

- *Must be Issued Prior to Test Assembly Receipt Scheduled for March 17, 2003*
- *90% Complete*
 - *Final Experiment Analyses Needed*
- *Issue For Review On February 13, 2003*
- *Issue Final On March 14, 2003*

Financial Status

• <i>Actuals Through January 12, 2003</i>	<i>\$258,164</i>
• <i>Outstanding Commitments</i>	<i>\$ 28,766</i>
• <i>Total Obligations</i>	<i>\$286,930</i>
• <i>Funding Available To-Date</i>	<i>\$325,920</i>
• <i>Funds Remaining</i>	<i>\$ 38,990</i>
• <i>Funding Authorized Through Jan.</i>	<i>\$425,920</i>

Financial Issues

AFC-1 Non Fertile Fuel Irradiation

- *Current Authorized Spending Rate: \$100K/Mo*
- *Total Funding Authorized During CR: \$600K*
- *To obtain authorization for experiment insertion, Project is required to have sufficient funding to cover IU charges and Project termination cost.*

AFC-1 Fertile Fuels Slated for Oct. 2003 Insertion

- *Currently No Funding Authorized*
- *To Meet Schedule, Experiment Analyses Must Begin in April*
 - *Funding Must be Available in March 2003*